SONY.

Compact
Hi-Fi Stereo System

Operating instructions ——————————————— GB

Mode d'emploi ——————————————————— F

Manual de Instrucciones ——————————————— E

Manual de Instruções ——————————————— P

COMPACT
disc
DIGITAL AUDIO

LBT-N250
HCD-N250

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

> Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

CAUTION	:	INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.
ADVARSEL	:	USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARO!	:	AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA LASERSÄTEILYLLE.
VARNING	:	LASERSTRÅLING NÄR DENNA DEL ÄR OPPNÅD OCH SPÄRREN ÄR URXOPPLAD.
ADVARSEL	:	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN.

This caution label is located inside the unit.

Before operating the unit
Remove the transit key on the bottom of the unit by following the instructions on the label, and keep it in a safe place.
The transit key protects the optical system against shock during transportation.

Transit key

To re-install the transit key when transporting the unit
1 Remove all CDs.
2 Press ⏏ OPEN/CLOSE to close the disc tray and confirm that " ♪ (or ♪ , ♪ ...)" has disappeared from the display.
3 Turn off the power.
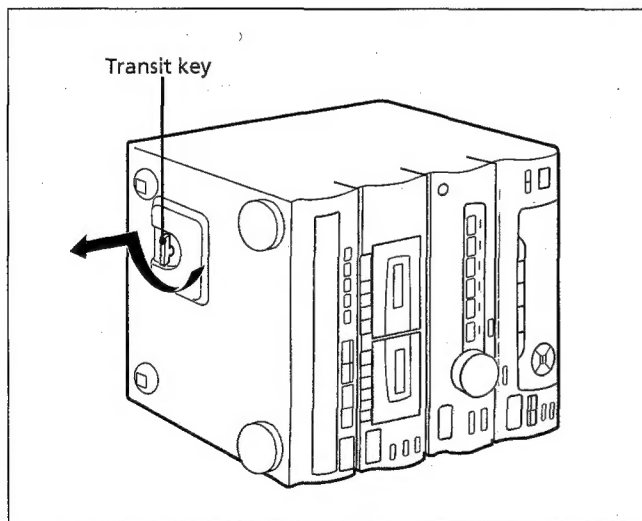4 Insert the transit key into its hole to lock.

Welcome !
Thank you for purchasing the Sony Hi-Fi Component System. This series is packed with fun features. Here are just a few:
• DBFB (Dynamic Bass Feedback) system that boosts low frequency range audio to provide deep, powerful bass sound
• A preset feature, that lets you store and recall up to 40 (30 for customers in Germany and Italy) of your favourite radio stations
• A graphic equalizer that lets you adjust the audio quality to fit five music types
• A timer that lets you set the CD player, tape player or radio to turn off whenever you want
• A dual tape deck that lets you record from the radio, CD player or from the other tape deck and relay play from both decks
• A CD player that lets you play up to 5 CDs in a row
• A remote that lets you control the music from your seat

Table of Contents

GB
3

* For the model supplied with the PS-LX56P turntable only

Chapter 1:
Setting Up

Connecting the Stereo

Inserting the Batteries

Setting the Clock

4

Connecting the Stereo

Use the illustrations below to connect your stereo.
If you want to connect any optional components to the stereo, see "Connecting Optional Equipment" in Chapter 7.

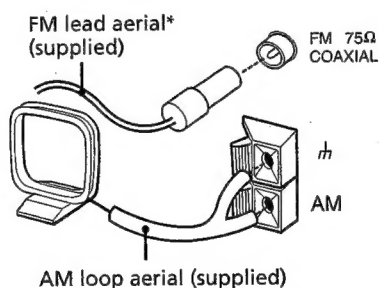### STEP 1 Connecting the Speakers

1 Twist the speaker cable coating and strip it from the end of the cable.

2 Connect the right speaker to R connectors and the left speaker to L connectors.
See the manual supplied with the speaker for details of the connections.
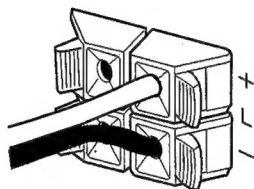
### STEP 2 Connecting the Aerial

FM lead aerial*
(supplied)

FM 75Ω
COAXIAL

AM

AM loop aerial (supplied)

*Note: Extend it horizontally

To improve the FM reception
Connect an outdoor FM aerial to the FM 75Ω terminal, using a 75-ohm coaxial cable.

Important
Ground the external aerial from ⊥ terminal against lightning with the screw clamp. To prevent a gas explosion, do not connect the ground wire to a gas pipe.

screw clamp

FM 75Ω
COAXIAL

AM

IEC standard socket connector (not supplied)
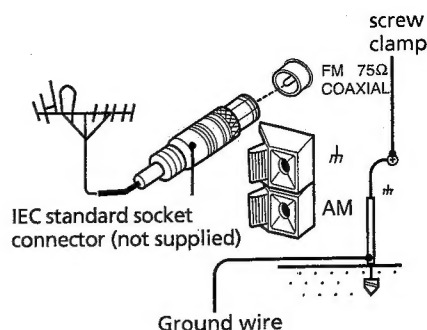
Ground wire

To improve the AM reception
After you connect the AM aerial, connect a 6- to 15- meter (20- to 50- feet) insulated wire to the AM terminal. Connect the ⊥ terminal to ground.

Important
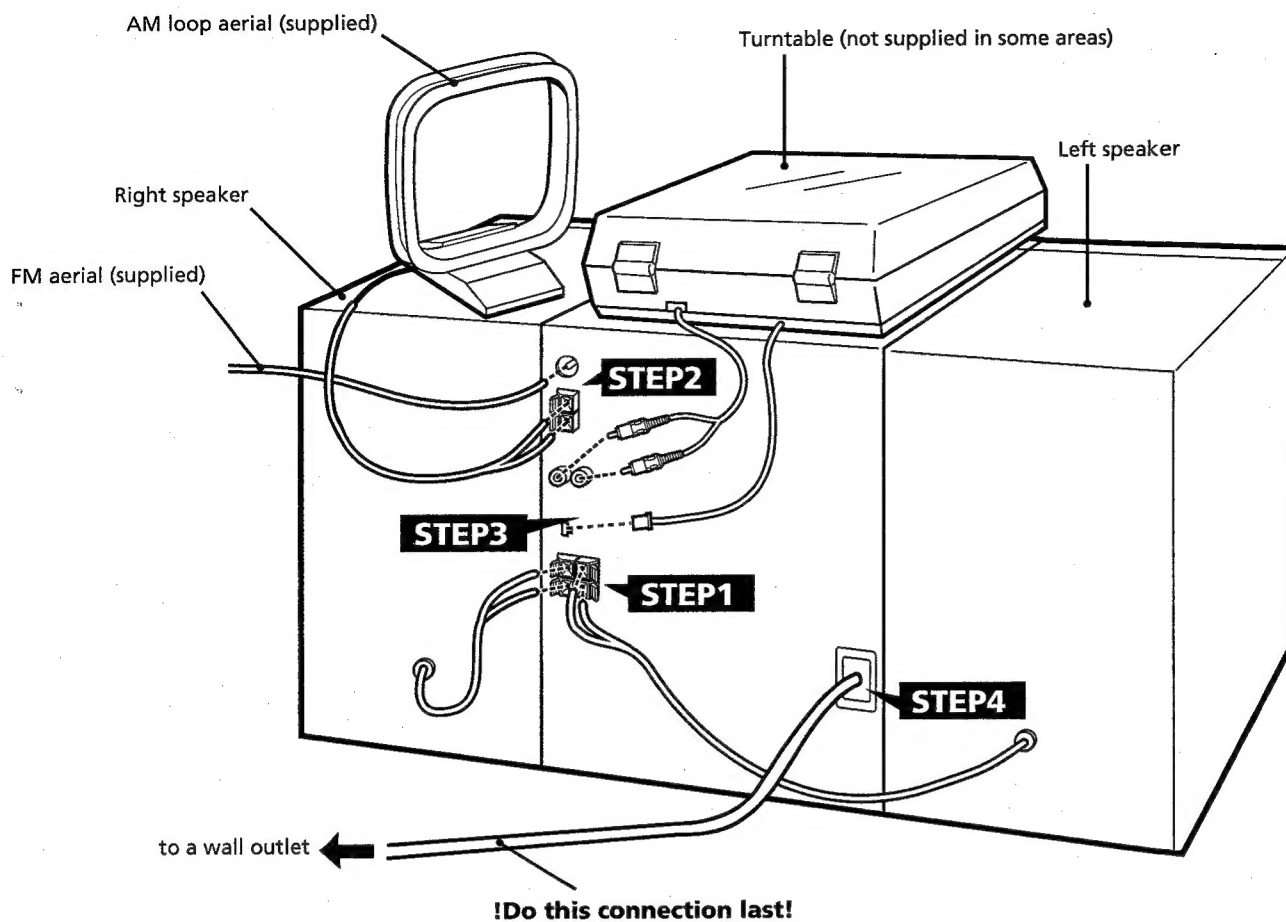Ground the external aerial from ⊥ terminal against lightning with the screw clamp. To prevent a gas explosion, do not connect the ground wire to a gas pipe.

screw clamp

FM 75Ω
COAXIAL

AM

Insulated wires (not supplied)

Ground wire
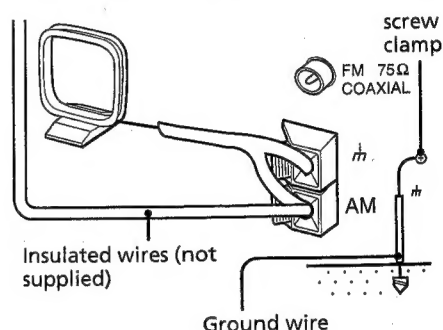
STEP 3 Connecting the Turntable (for the model supplied with the turntable only)

Connect the supplied turntable PS-LX56P to the PHONO IN jacks and the POWER SOURCE terminal.
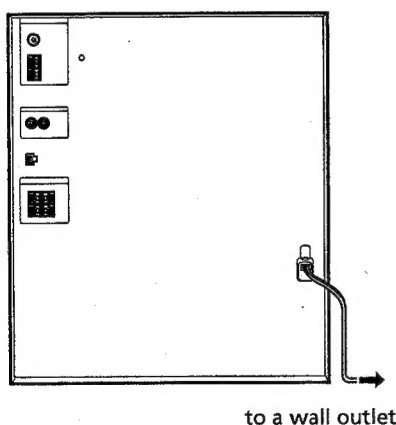
AM loop aerial (supplied)

Turntable (not supplied in some areas)

Left speaker

Right speaker

FM aerial (supplied)

STEP2

STEP3

STEP1

STEP4

to a wall outlet ◀━━

!Do this connection last!
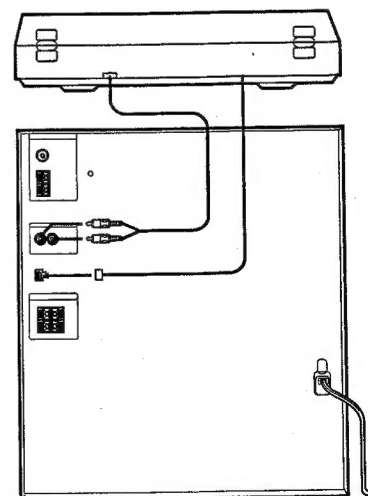
STEP 4 **Connecting the Power**

Connect the mains lead to a wall outlet after you have made all the above connections.
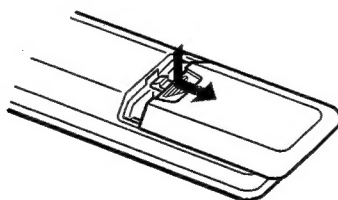
to a wall outlet

Note
• When you turn on the system power for the first time, the CD changer starts to function and the disc calendar (1 2 3 4 5) in the display flashes for about 15 seconds. You can operate the CD player after the flashing is finished.
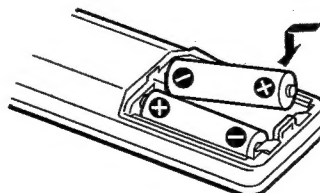

Inserting the Batteries

Install two R6 (size AA) batteries in the supplied remote for remote control.

1 Open the lid.

2 Insert two R6 (size AA) batteries. Match the + and − to the diagram in the battery compartment.

3 Close the lid.

Battery life
You can expect the remote to operate for about six months (using Sony SUM-3 (NS) batteries) before the batteries run down. When the batteries no longer operate the remote, replace all the batteries with new ones.
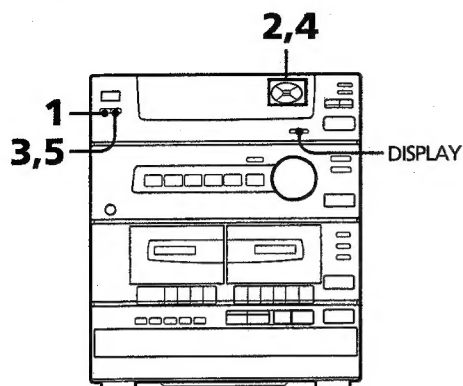
To avoid battery leakage
If you are not going to use the remote for a long time, remove the batteries to avoid damage caused by corrosion from battery leakage.
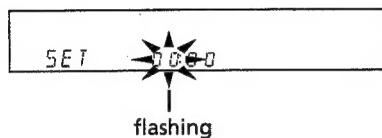
Setting the Clock

The built-in clock shows the time in the display.

1 Keep pressing CLOCK SET until the hour indicator begins flashing.

flashing

2 Set the current hour by pressing ▲ or ▼ (CURSOR CONTROL) until the correct hour appears.
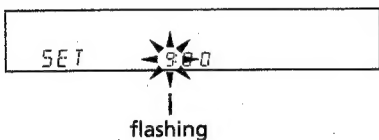
flashing

3 Press CLOCK ENTER/NEXT . The minutes indicator begins flashing.

flashing

4 Set the current minute by pressing ▲ or ▼ until the correct minute appears.

flashing
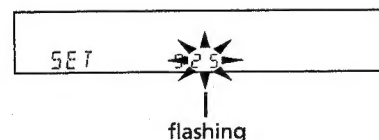
5 Press CLOCK ENTER/NEXT. Use the time signal to set the clock accurately. "OK" appears in the display and the clock starts running.

To check the time while power is on
Press DISPLAY.
The current time appears for a few seconds.

To correct the clock setting
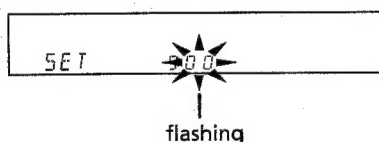Repeat steps 1 to 5.
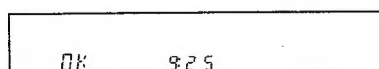
Chapter 2:
the Turntable

Playing a Record
(for the model supplied
with the turn table only)

Playing a Record (for the model supplied with the turntable only)

You can listen to analog discs with the supplied turntable PS-LX56P.
The turntable turns on/off according to the ON/OFF of the unit.
If your system is not supplied with the turntable, see "Connecting Optional Equipment".
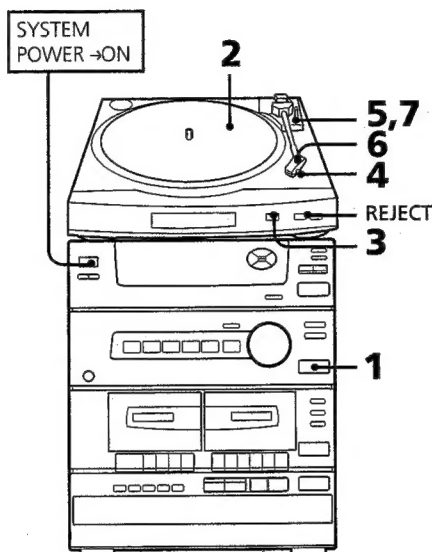
1 Press PHONO.

2 Place a record on the turntable.
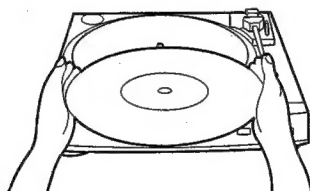
3 Press SPEED to select the speed.

4 Remove the stylus cover from the cartridge, and release the stopper from the tone arm.

Stylus cover — Stopper
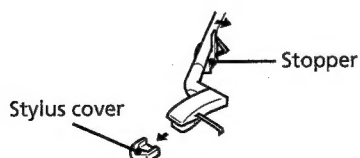
5 Set the cuing lever to ▼.
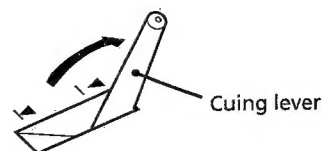
Cuing lever

6 Move the tone arm by hand to the desired point on the record.
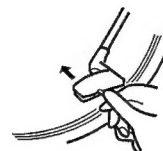
7 Set the cuing lever to ▼.
When the record is played to the end, the tone arm returns to the armrest and the turntable stops.

To stop during play
Press REJECT.

To play a different part of the record
Lift the tone arm by setting the cuing lever to ▼, move the tone arm by hand to the desired point, then set the cuing lever to ▼.

To play a 17-cm record
Use the supplied 45-r/min adaptor.

If the tone arm moves outward when you move it close to the center
Do not resist this movement, as it may damage the automatic return mechanism.

If the tone arm does not return to its armrest
Press REJECT.

Chapter 3:
the CD Player

- **Playing CDs (normal play)**

- **Playing Tracks in Random Order (shuffle play)**

- **Playing Tracks in the Desired Order (programme play)**

- **Playing Tracks Repeatedly (repeat play)**

Playing CDs (normal play)

After you insert up to five CDs at one time, you can play all tracks or discs in the original order consecutively (normal play). Besides, you can play them in four modes: normal, shuffle, programme or repeat. Before you play the CD, decrease the sound level by turning the VOLUME control counterclockwise, to prevent damage to the speakers.
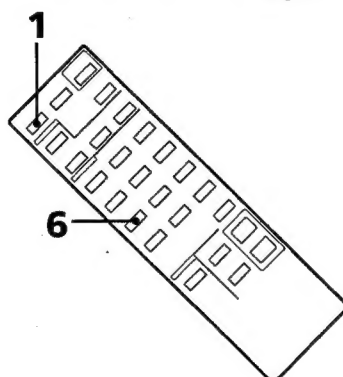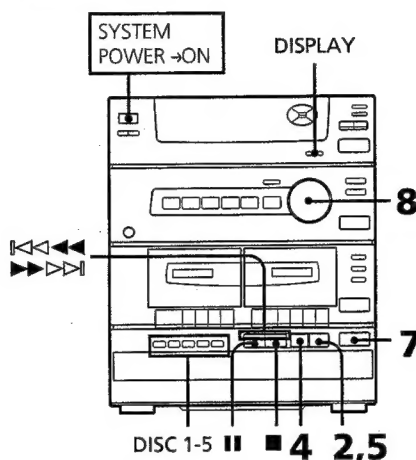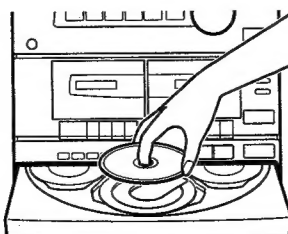

1 Press FUNCTION on the remote repeatedly until "CD" appears in the display.
CD is selected.

2 Press ⏏ OPEN/CLOSE to open the disc trays.

3 Holding the CD by the edge, place the CD on the disc tray with the label side up. (When you play an 8-cm CD, place it without an adaptor on the inner circle of the disc tray.)

4 Press DISC SKIP to place up to four more CDs in the tray.
The next tray appears each time you press DISC SKIP.
The disc on the front tray will be selected first.

5 Press ⏏ OPEN/CLOSE again.
The disc number appears in the display.
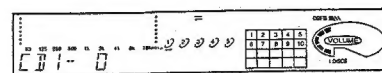
6 Press CONTINUE on the remote to choose whether to play "1 DISC" or "ALL DISCS".

Choose	To play
1 DISC	Only a CD you have selected.
ALL DISCS	All CDs consecutively in the order of disc number. Empty disc trays are skipped.
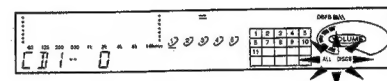
7 Press CD ▷ (or ► on the remote) or DISC 1 – 5.
Play starts from the beginning of the selected CD.
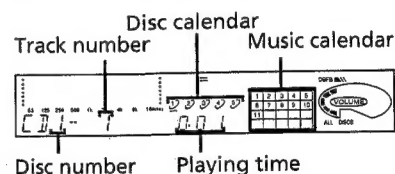
8 Adjust the volume.
Turn VOLUME clockwise to turn up the volume, or counterclockwise to turn down. (Or press VOL +/– on the remote.)

To	Press
Stop play	■
Pause	❚❚
Resume play	CD ▷ or ❚❚
Remove the CD	⏏ OPEN/CLOSE

To check the remaining or total playing time

Press DISPLAY repeatedly.
Each time you press DISPLAY while playing a CD, the display changes as follows.

↓

Playing time on the current track

↓

Remaining time on the current track

↓

Remaining time on the CD (1 DISC play mode) or "PLAY" indication (ALL DISCS play mode)

↓

Clock (appears for a few seconds)

Note
• "-- . -- " appears in the display when the time is 100 minutes or more.

One Touch Play feature
Press CD ▷ (or ► on the remote) when the power is off. You can listen to the last selected CD without pressing any other buttons, when a CD is in the player.
If you press CD ▷ or DISC 1 – 5 while other source is selected, the CD player is selected and the play starts automatically.

Locating a Specific Track

You can quickly locate any track while playing or pausing a CD.

To locate	Press
the next or succeeding tracks	►►▷▷| (or ►►| on the remote) repeatedly until you find the track
the current or preceding tracks	|◁◁◄◄ (or |◄◄ on the remote) repeatedly until you find the track

Locating a Particular Point in a Track

You can locate a particular point in a track while playing or pausing a CD. Use the buttons on the unit to operate this feature.

To locate a point	Press
While monitoring the sound	►►▷▷| (forward) or |◁◁◄◄ (backward) and hold down until you find the point.
Quickly by observing the display during pause	►►▷▷| (forward) or |◁◁◄◄ (backward) and hold down until you find the point. You will not hear the sound during this operation.

Locating a Specific CD

You can locate the beginning of any CD during play, pause, or stop mode.

To locate the beginning of a particular CD and start playing
Press the corresponding DISC 1 – 5.

To change to the next CD
Press DISC SKIP.

Playing Tracks in Random Order (shuffle play)

You can play all the tracks on a CD or all CDs in random order.

DISC 1-5

CONTINUE
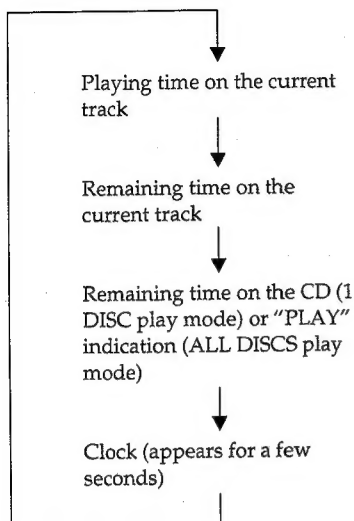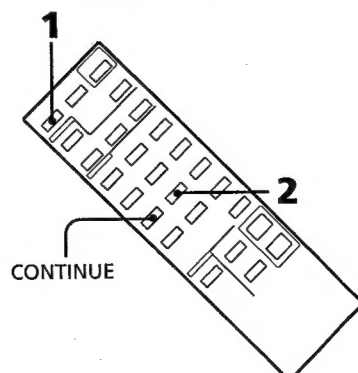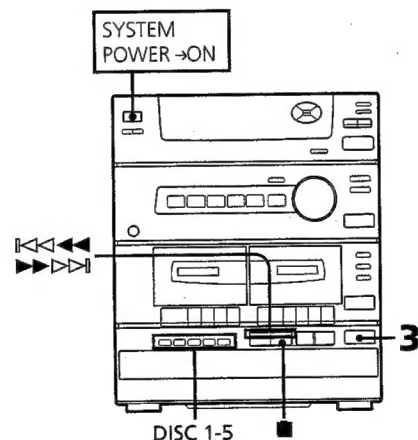
1 Press FUNCTION on the remote repeatedly until "CD" appears in the display.

2 Press SHUFFLE on the remote to choose whether to play "1 DISC" or "ALL DISCS".
"ALL DISCS SHUFFLE" or "1 DISC SHUFFLE" appears in the display.
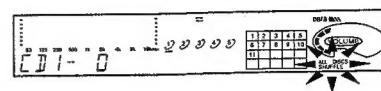
3 Press CD ▷ (or ► on the remote).
" 🔁 " appears and then all the tracks play in random order.
To skip to the next track, press ►►▷▷|.
To replay the current track, press |◁◁◄◄. You cannot replay the previous track.

To stop playing
Press ■.

To cancel shuffle play
Press CONTINUE on the remote.

To select the desired CD
Press DISC 1 – 5 during "1 DISC SHUFFLE" play.

Playing Tracks in the Desired Order (programme play)

You can programme up to 32 tracks from all the CDs in the order you want them to be played.
Use the buttons on the remote to do this operation.

CONTINUE
CHECK
CLEAR

1 Press FUNCTION repeatedly until "CD" appears in the display.

2 Press PROGRAM.
"PROGRAM" appears in the display.

3 Press DISC SKIP repeatedly (or DISC 1 – 5) to choose a CD.

4 Press ◄◄ or ►►I to choose a track.
The disc number, track number and the total playing time appear.

5 Press PROGRAM.
The chosen track is programmed and its number lights up in the music calendar. If the track number disappears before you press PROGRAM, go back to step 3.

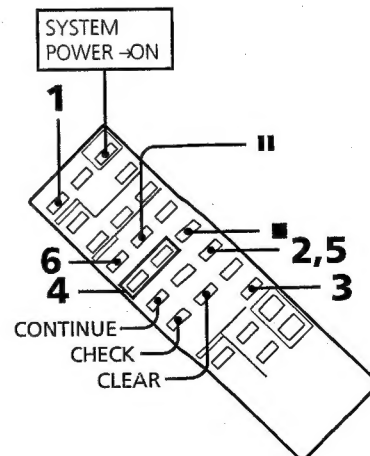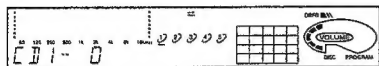To programme additional tracks from the same CD, repeat steps 4 and 5.

To programme additional tracks from another CD, repeat steps 3 to 5.

Note
• If "– – . – – " appears instead of the total playing time, this means
  – you have programmed a track number which exceeds 20.
  – the total time has exceeded 100 minutes.

6 Press ► (or CD ▷).
All the tracks play in the order you chose.

To	Press
Check the programme	CHECK repeatedly*1
Programme a pause	‖*2
Stop play	■
Cancel the programme play	CONTINUE*3
Erase a track from the end	CLEAR in stop mode
Erase a specific track	CHECK repeatedly so the number of the track lights up, and press CLEAR
Erase the entire programme	■ once in stop mode

Chapter 3: the CD Player

*1 After the last track appears, "CHECK End" appears in the display.
*2 "P" appears in the display and the total playing time is reset to 0.00.
*3 The programme is erased.

To change the order of programmed tracks
Erase the entire programme and create a new one.

The whole programme is erased also when:
• you select other play modes.
• you remove the CDs.

Playing Tracks Repeatedly (repeat play)

The repeat play function repeats a single CD or all CDs in normal, programme, and shuffle play.
In normal play mode only, the player can also repeat a single track.
Use the button on the remote to do this operation.
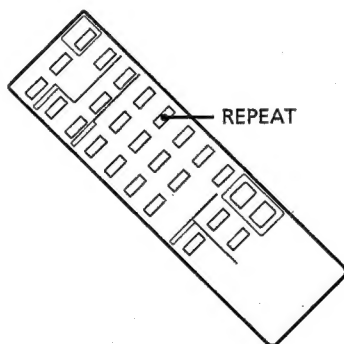
REPEAT

Repeating all the tracks
Press REPEAT once so that "REPEAT" lights up in the display.

Playing mode	Tracks played
Normal play (ALL DISCS)	Repeats all the tracks on all CDs (REPEAT), or the current track (REPEAT 1).
Normal play (1 DISC)	Repeats all the tracks on the current CD (REPEAT), or the current track (REPEAT 1).
Shuffle play (ALL DISCS)	All tracks on the all CDs are reshuffled.
Shuffle play (1 DISC)	All tracks on the CD are reshuffled.
Programme play	Repeats all the programmes in their programmed order.

Repeating a single track (in normal play only)
Press REPEAT twice while playing the desired track so that "REPEAT 1" lights up in the display.

To cancel repeat play
Press REPEAT so that "REPEAT" or "REPEAT 1" disappears from the display.

Listening to the Radio

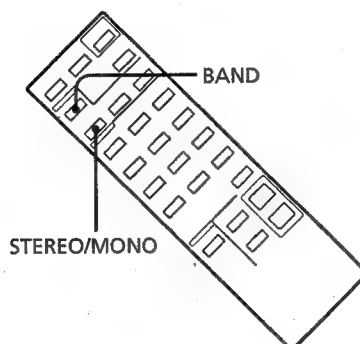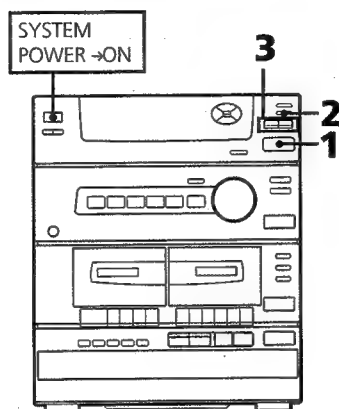When you want to play a radio programme, you can have the tuner automatically scan the radio frequencies and tune in the stations with clear signals. This feature saves you time in searching for stations with clear signals.
However, stations with weak signals may be skipped by automatic tuning. Manually tune in the ones skipped by automatic tuning.
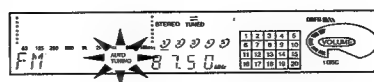

1 Press TUNER/BAND (or BAND on the remote) repeatedly until the band you want appears in the display.
As you press this button, the band changes as follows:

German and Italian models:
FM ◀─▶ AM

Other models:
┌─▶ FM ─▶ MW ─▶ LW ─┐
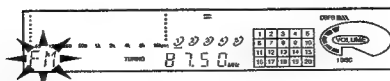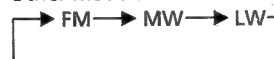
2 Press TUNING MODE repeatedly until "AUTO TUNING" appears in the display.

3 Press TUNING (+/−).
The tuner starts scanning radio frequencies, and stops when it finds a clear station. "TUNED" appears in the display window. "STEREO" also appears if the FM station tuned is broadcasting in stereo.
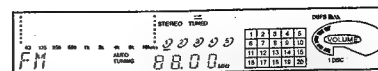
4 If you don't want to listen to the station selected, press TUNING (+/−) to restart the scan.

When the desired station is not tuned in
Automatic tuning may skip the stations with weak signal and continue scanning without a stop. In this case, tune in the station manually.
1 Press TUNING MODE repeatedly until "TUNING" appears in the display.
2 Press TUNING (+/−) repeatedly until the desired station is tuned in.

To improve AM broadcast reception
Reorient the supplied AM loop aerial for AM (MW and LW).

When an FM programme is not clear to receive
Press STEREO/MONO on the remote so that "MONO" appears in the display. There will be no stereo effect, but the reception will improve. Press STEREO/MONO on the remote again to restore the stereo effect.

One Touch Play feature
Press TUNER/BAND (or BAND on the remote) when the power is off or when you are listening to another sound source. You can listen to the last received station without pressing any other buttons.

GB

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Presetting Radio Stations

You can store radio frequencies in the tuner's memory to tune in your favorite stations quickly. You can preset up to 20 FM stations, 10 MW stations and 10 LW stations (for German and Italian models: 20 FM stations and 10 AM stations) in any order.
Use the buttons on the unit for presetting stations.

1 Press TUNER/BAND (or BAND on the remote) repeatedly until the band you want appears in the display.
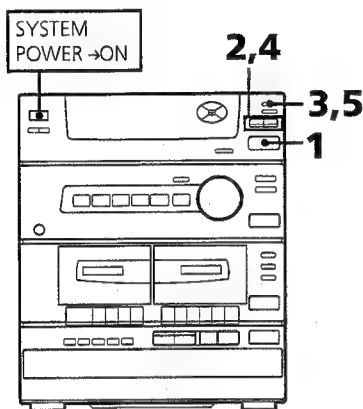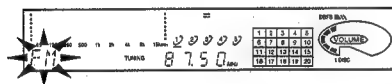
German and Italian models:
FM ←→ AM

Other models:
┌→ FM → MW → LW ┐

2 Press TUNING (+/–) to tune in the station you would like to store.

3 Press TUNING MEMORY.
"MEMORY" appears in the display.
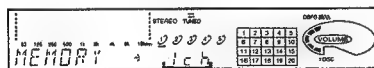
Preset channel number

4 Press TUNING (+/–) to display the preset channel number you decided on (1 to 20 for FM, 1 to 10 for MW/LW/AM).

5 Press TUNING MEMORY.
"MEMORY" disappears, and the station is stored at the preset channel number you decided on.

Station frequency
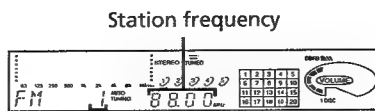
Preset channel number

6 Repeat steps 1 to 5 for each station you would like to store.

To erase a stored station

Store a new station at a previously used preset station number. It will erase the old station and replace it with the new station.

If you have trouble storing a station
Make sure "MEMORY" is lit in the display. If not, press TUNING MEMORY again so that "MEMORY" lights up (for about eight seconds) in the display, and then proceed with steps 4 and 5.

Playing Preset Radio Stations

Once you have preset the stations, use the TUNING (+/–) buttons to quickly tune in your favourite stations.
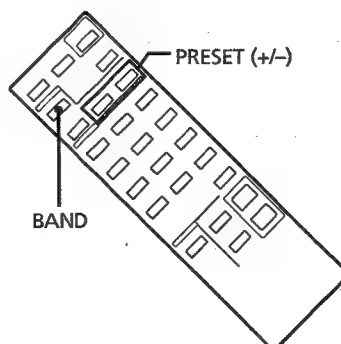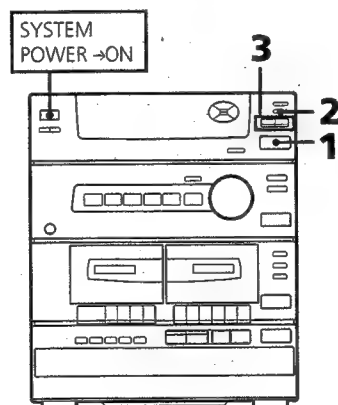
1 Press TUNER/BAND (or BAND on the remote) repeatedly until the band you want appears in the display.

German and Italian models:
FM ←→ AM

Other models:
┌→ FM → MW → LW ┐
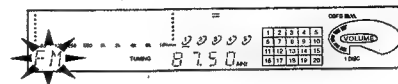
2 Press TUNING MODE repeatedly so that "PRESET" appears in the display.
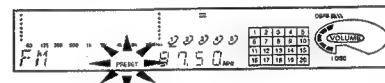
3 Press TUNING (+/–) (or PRESET (+/–) on the remote) to tune in a preset station.
The station frequency appears and the station begins broadcasting.
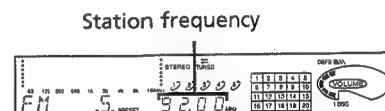
Station frequency

Preset channel

the Tape Player

Playing a Tape

1 Press TAPE.
  TAPE is selected.

2 Press ■/▲ to open the tape compartment.
  Insert a recorded tape in deck A or B with the tape side facing down and the side you want to play facing forward.
  Push to close the compartment.
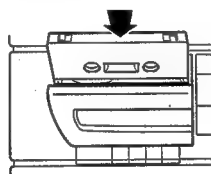
3 Press TAPE SELECT to select tape type I or II.

4 Press ▷.
  The tape starts playing.

To	Press
Stop play	■/▲
Pause	II PAUSE
Resume play after pause	II PAUSE
Fast forward	▶▶*
Rewind	◀◀*
Remove the cassette	■/▲

* Press ■/▲ when the tape comes to the end. If you leave it, the tape might be damaged.

To play both decks in succession (relay play)
Relay play follows B → A sequence.

1 Press ■/▲ and insert recorded tapes in both decks.
2 Press ▷ on deck B.
3 Press II PAUSE and ▷ on deck A.
 To stop relay play, press ■/▲ on the playing deck.

If you play both decks at the same time
You hear the sound from deck B.

When listening to a tape recorded with the Dolby* B-type noise reduction system
Set the DOLBY NR selector to ON.
Dolby noise reduction system reduces tape hiss noise in low-level high-frequency signals.
* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and double-D symbol ▯▯ are trademarks of Dolby Laboratories Licensing Corporation.

One Touch Play feature
Press ▷ on the deck A or B when the power is off or when you are listening to another sound source.
You can listen to the tape without pressing any other buttons when a tape is in the player. If no tape is inserted, the system will just turn on.

Note
Make sure the tape player stops when you turn off the unit.

Recording From the Turntable (For the model supplied with the turntable only)

You can record from the supplied turntable PS-LX56P onto a tape. Use TYPE I (normal) or TYPE II (CrO₂) tape.
If your system is not supplied with the turntable, see "Connecting Optional Equipment".

1 Place a record on the turntable.

2 Press ■/▲ and insert a blank tape into deck B with the side you want to record on facing forward.
Make sure the tabs on the cassette have not been removed.

3 Press TAPE SELECT to select tape type I or II.

4 When you want to reduce the hiss noise in low-level high-frequency signals, set DOLBY NR to ON.
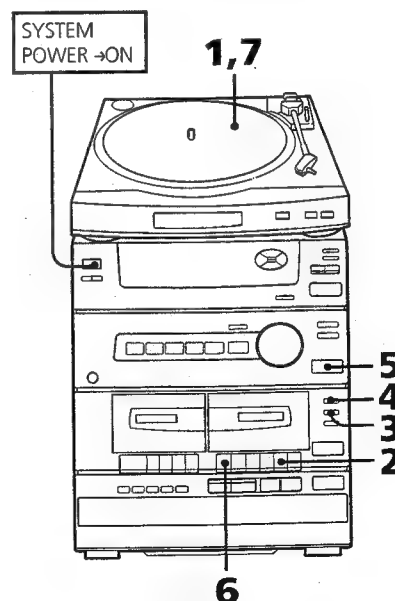
5 Press PHONO.

6 Press ● REC.
Recording starts.

7 Play a record (See "Playing a Record" for details).

To stop recording.
Press ■/▲.

Adjusting the volume or DBFB will not affect the recording level
But these controls will change the sound levels you hear through speakers or headphones.

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Recording a CD

You can record from a CD to a tape. Use TYPE I (normal) or TYPE II (CrO2) tapes. To listen to other sources while recording, you must stop recording.
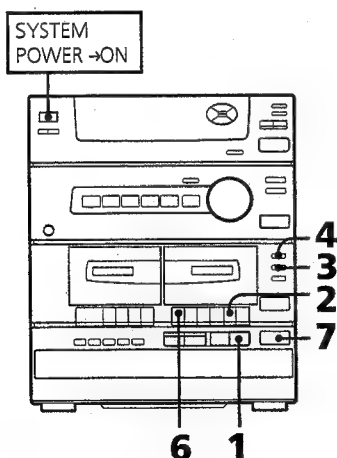
1 Press ▲ OPEN/CLOSE and place a CD. Then, press ▲ OPEN/CLOSE again to close the tray. Make sure the CD you want to record is on the front tray. Total number of tracks and the total playing time appear in the display.

2 Press ■/▲ and insert a blank tape into deck B with the side you want to record on facing forward.
Make sure the tabs on the cassette have not been removed.

3 Press TAPE SELECT to select tape type I or II.

4 When you want to reduce the hiss noise in low-level high-frequency signals, set DOLBY NR to ON.

5 Press FUNCTION on the remote repeatedly until "CD" appears in the display.

6 Press ● REC.
Recording starts.

7 Press CD ▷.
The CD player starts playing.
You can play CD after programming (See "Playing Tracks in the Desired Order (programme play)").

| To	Press
Stop recording	■
Pause recording	II

Adjusting the volume or DBFB will not affect the recording level
But these controls will change the sound levels you hear through speakers or headphones.

Notes
• Make sure the tape player stops when you turn off the unit.
• Turn the audio emphasis off when the sound level of the CD you want to record is very high, because it may distort the recording sound.

Recording a CD: Specifying Tape Length (time edit)

You can have the stereo system create programmes based on tape length.
The CD player makes programmes that will fit the tape length. For example, if you use a 46-minute tape to record a 50-minute CD, the CD player will automatically choose tracks that will fit within the 46-minutes, filling as much of the tape as possible. The player will not programme those tracks beyond track number 20.
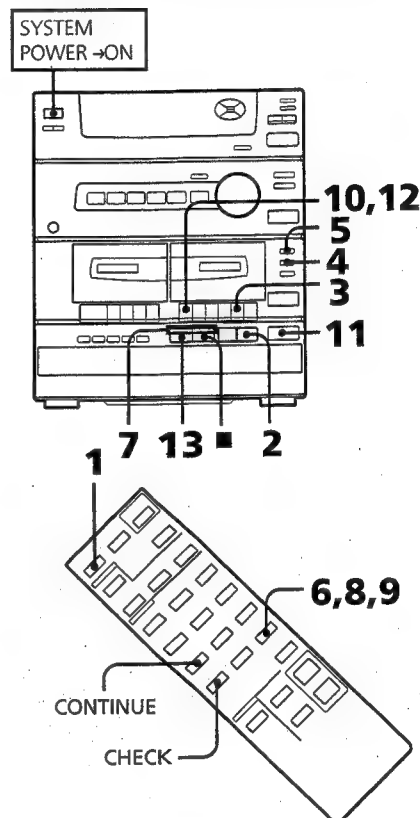
1 Press FUNCTION on the remote repeatedly until "CD" appears in the display.

2 Press ▲ OPEN/CLOSE and place a CD. Then, press ▲ OPEN/CLOSE again to close the tray. Make sure the CD you want to record is on the front tray. Total number of tracks and the total playing time appear in the display.

3 Press ■/▲ and insert a blank tape into deck B with the side you want to record on facing forward.
Make sure the tabs on the cassette have not been removed.

4 Press TAPE SELECT to select tape type I or II.

5 When you want to reduce the hiss noise in low-level high-frequency signals, set DOLBY NR to ON.

6 Press EDIT on the remote once. "TIME EDIT" appears in the display.

7 Press I◁◁◀◀ or ▶▶▷▷I to designate the tape length or "HALF".
Choose the indicator for tapes of corresponding minute length.
Choose "HALF" if you want the CD player to play just half the total playing time of the CD. You cannot select "HALF" when you want to record CD which has more than 20 tracks.
As you press the button, the indicator changes as follows:

```
      ┌─HALF◄──►C-46◄──►C-54─┐
      │        (23.00)  (27.00) │
      └─C-90◄──►C-74◄──►C-60─┘
        (45.00)  (37.00)  (30.00)
```

```
TAPE    C-46
```
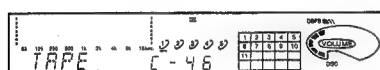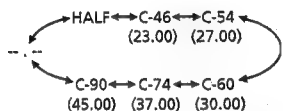
8 Press EDIT on the remote.
The player determines the tracks to be recorded on side A automatically.

Tracks to be recorded on side A
Total playing time on side A

```
SIDE-A  22.34
```

flashing
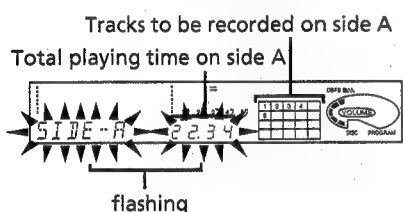
9 When you record on both sides, press EDIT again.
The player determines the tracks to be recorded on side B.

Tracks to be recorded on both sides

```
CD1-12   21.37
```

Last track   Total playing time on side B
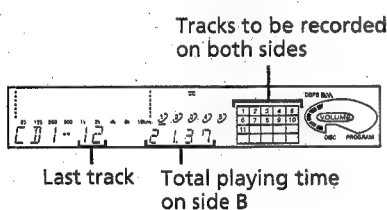
10 Press ● REC.
Recording starts.

11 Press CD ▷
CD player plays the tracks to be recorded on side A and then pauses.

12 Set the tape to the begining of side B, then press ● REC.

13 Press II or CD ▷ on the CD player.
CD player starts playing the tracks to be recorded on side B.

To stop recording
Press ■/▲.

To check the order
Press CHECK repeatedly.

To select the desired tracks beforehand
You can place priority on some tracks to be recorded by selecting them before programming them up to 20 tracks. See "Playing Tracks in the Desired Order (programme play)".
If you have programmed a track number which exceeds 20, you cannot use this feature.

To cancel time edit
Press CONTINUE.

Recording From the Radio

You can record from the tuner onto a tape. Use TYPE I (normal) or TYPE II (CrO₂) tape.

SYSTEM POWER →ON

1 Press TUNER/BAND several times until the desired radio band appears.

2 Tune in the radio station you want to record. (See "Listening to the Radio", or "Playing Preset Radio Stations" for details.)

3 Press ■/▲ and insert a blank tape into deck B with the side you want to record on facing forward.
Make sure the tabs on the cassette have not been removed.

4 Press TAPE SELECT to select tape type I or II.

5 When you want to reduce the hiss noise in low-level high-frequency signals, set DOLBY NR to ON.

6 Press ● REC.
Recording starts.

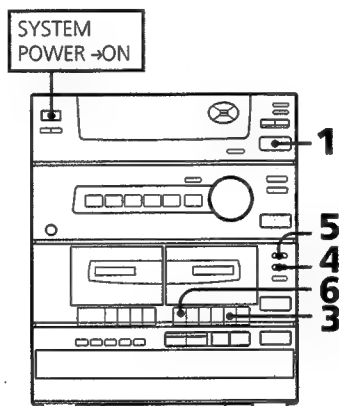**To stop recording**
Press ■/▲.

Adjusting the volume and DBFB will not affect the recording level
But these controls will change the sound levels you hear through speakers or headphones.

Recording From Another Tape (dubbing)

You can record the whole tape onto another by normal or high speed dubbing. Use the buttons on the unit and TYPE I (normal) or TYPE II (CrO₂) tape for dubbing.

When you use high speed dubbing feature
Save the current audio emphasis in the memory (see "Making Your Personal Audio Emphasis File (personal file)" and then, cancel the audio emphasis and DBFB.

Audio emphasis and DBFB do not affect the sound while dubbing
It is restored when dubbing is completed.

SYSTEM POWER →ON
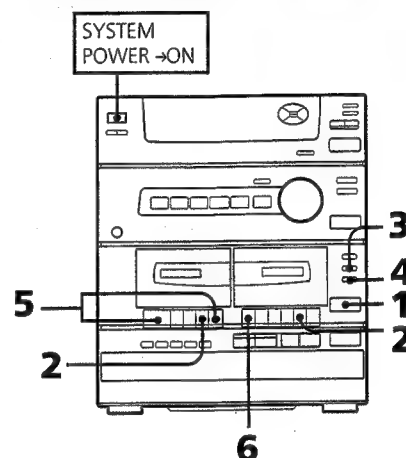
1 Press TAPE (function).
TAPE is selected.

2 Press ■/▲, and insert a recorded tape in deck A with the side you want to play facing forward.
Also, insert a blank tape in deck B with the side you want to record on facing forward.
Make sure the tabs on the cassette in deck B have not been removed.

3 Press TAPE SELECT to select tape type I or II.
The switch setting is effective on both decks.

4 Press DUBBING SPEED to select the dubbing speed.

5 Press II PAUSE and ▷ on deck A.
Deck A pauses for playing.

6 Press ● REC on deck B.
Deck A releases playing pause and deck B starts recording simultaneously.

To stop dubbing
Press ■/▲ on deck A, then press ■/▲ on deck B.

Do not change the sound source while dubbing.

You do not have to set DOLBY NR selector
The tape in deck B is automatically recorded in the same state as the tape in deck A.

Chapter 5: the Tape Player

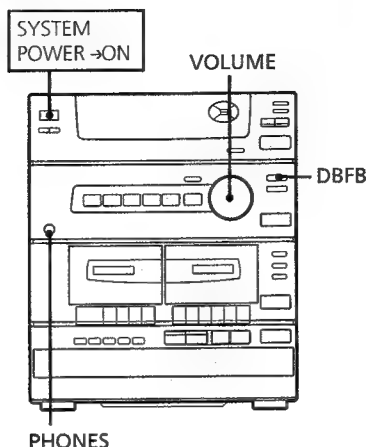# Chapter 6:

Sound Adjustment

Adjusting the Sound

Selecting the Audio Emphasis

Adjusting the Audio Emphasis

Making Your Personal Audio Emphasis File (personal file)

Adjusting the Sound

To fully enjoy the sound coming from your stereo system, make the following audio adjustments. See sections following this one for additional sound adjustments.

To adjust the volume
Rotate VOLUME on the unit or press VOL (+/–) on the remote.

To reinforce bass
Press DBFB* repeatedly and choose DBFB ▲\\ or DBFB ▲\\\\\\ .

"DBFB ▲\\\\\\ " is more effective than "DBFB ▲\\ ".

* DBFB = Dynamic Bass Feedback

To listen through the headphones
Connect the headphones to the PHONES jack. No sound will come from the speakers.

Selecting the Audio Emphasis

Your stereo system has been factory set to five specially recommended audio emphases. Choose from among these five preset settings according to the type of music you are listening to.
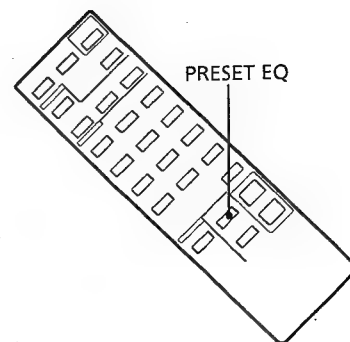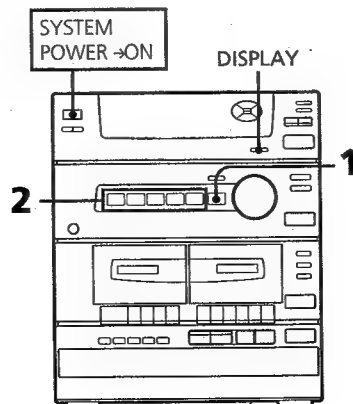
1 If the indicator of P.FILE is lit, press P.FILE so that the indicator turns off.

2 Press the desired preset equalizer setting button on the unit or PRESET EQ on the remote repeatedly until the indicator of the desired setting button lights up.
The equalizer setting affects the recording sound level on a tape.

Press	To get
ROCK	Powerful, clear sounds, emphasizing low and high audio
POPS	Light, bright sounds, emphasizing high and middle range audio
JAZZ	Percussive sounds, emphasizing bass audio
CLASSIC	Broad, open sounds with plenty of reverberations
DANCE	Sounds similar to a disco by intensifying bass sound

To cancel the audio emphasis
Press the selected button again (or press PRESET EQ on the remote repeatedly) so that the indicator of the button lights off.
Then, "EFFECT OFF" appears in the display.

The audio emphasis except DBFB enhances the recording sound
Therefore, we recommend you to cancel the audio emphasis when recording. If the audio emphasis is on and the sound level of the CD you want to record is very high, the recording sound may become distorted. Otherwise, if you want to record the enhanced sound for special uses such as your car stereo, walkman, etc., turn the audio emphasis on.
Also, we recommend you to cancel it when you play a tape recorded with audio emphasis, because the sound may be affected doubly and become distorted if it is left on.

To change the equalizer display

Each time you keep pressing DISPLAY for a few seconds, the equalizer display changes to show one of the four displays below.
If the sound does not come in for about a minute, the spectrum analyzer display turns to a picture. The display is restored when the sound comes in.

Spectrum analyzer 1

Spectrum analyzer 2

Spectrum analyzer 3

Graphic equalizer curve
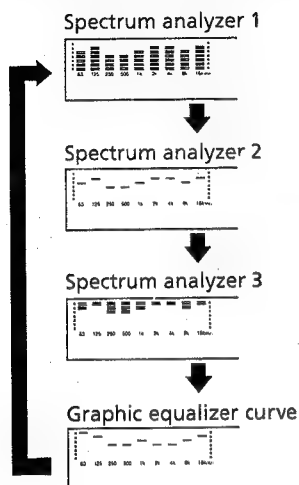
and the level value flashes.

3 Press ▶ or ◀ to select the frequency range you want to change.

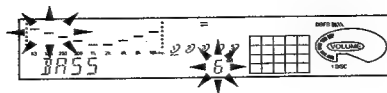**4** Press ▲ or ▼ to raise or lower the level of the frequency range.

5 Repeat steps 3 and 4 to adjust other frequency ranges.

To create the atmosphere of a movie theater or concert hall
Press S-SURROUND so that the SUR (((■))) indicator lights up.

3 Adjust the sound using CURSOR CONTROL. (See "Adjusting the Audio Emphasis" for details.)

4 Press EQ MEMORY.
"MEMORY" appears and a file number flashes in the display.

5 Press a file number button that you decide on.
"MEMORY" disappears.
The adjusted equalizer curve and the surround effect settings are stored at the file number you selected.

To call up the personal file
Press P.FILE (or press PRESET EQ on the remote repeatedly) so that the indicator of P.FILE lights up and then, press the desired file number button.

To hear the effect of the adjustment
Press the selected button repeatedly.
You can compare the difference between the adjusted sound (the indicator is lit) and the sound with no equalizer-effect (the indicator is not lit).

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Adjusting the Audio Emphasis

This feature lets you arrange the audio emphasis by raising and lowering the level of specific frequency ranges. Use the buttons on the unit to do this operation.

S-SURROUND
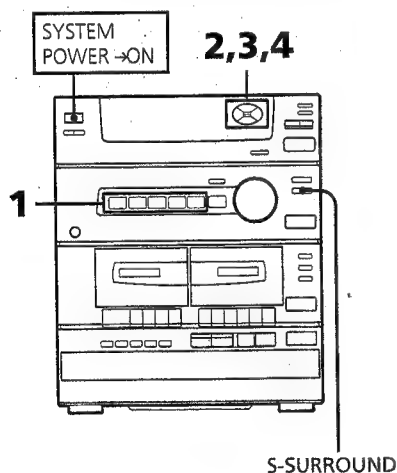
1 Press the desired equalizer setting button.

2 Press one of ◀, ▶, ▲ or ▼ (CURSOR CONTROL).
The graphic equalizer curve and fequency range appears in the display,

Making Your Personal Audio Emphasis File (personal file)

You can create a personal file of audio patterns and store them in the memory of the player. Later, call up an audio pattern to play a favourite tape, CD, or radio programme. Create up to five audio files.

P.FILE
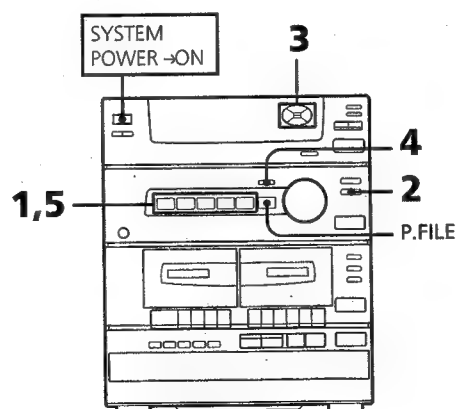
1 Press the desired equalizer setting button.

2 Press S-SURROUND to activate or deactivate the surround effect to suit your taste.

Falling Asleep to Music

Connecting Optional Equipment

Falling Asleep to Music
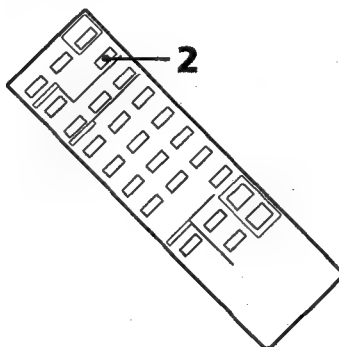
You can set the stereo system to turn off automatically so you can go to sleep to music (Sleep timer).
Before setting sleep timer, make sure the clock has been set correctly.

1 Play your favourite sound source.

2 Press SLEEP repeatedly to choose how long you want the music to play. "SLEEP" and minutes indication appear in the display. The power will turn off after 90 to 10 minutes depending on the length of time you choose.

```
    ┌──► 90─► 80─► 70 ──┐
    └─OFF ◄─10 ◄─20 ◄─ ······ ◄─┘
```
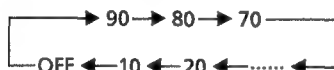
To cancel the sleep timer
Press SLEEP repeatedly until "OFF" appears in the display.

To check the remaining time
Press SLEEP once.
The remaining time appears in minutes for several seconds.

When you use the sleep timer function while listening to the tape
Choose the minutes longer than half of the tape length, because the play button of the tape player does not spring back automatically.
e.g. Choose 50 minutes when you listen to the tape of 90 minutes.

Connecting Optional Equipment

For greater enjoyment of your stereo system, you can connect other components to the stereo. You can connect:

- an optional turntable to the PHONO IN jacks
- headphones to the PHONES jack on the front panel

To connect an optional turntable
1 Connect the turntable PS-LX56 (optional) to the PHONO IN jacks on the rear panel of the stereo.
2 Press PHONO on the front of the stereo or FUNCTION on the remote until "PHONO" appears in the display.
The turntable sound comes through the speakers.
You can also record the turntable sound.

For Your Information

Precautions

If you have any questions or problems concerning your stereo system, please consult your nearest Sony dealer.

On operating voltage

Before operating the stereo system, check that the operating voltage of your stereo system is identical with the voltage of your local power supply.

Operating voltage	220 – 230 V AC, 50/60 Hz

On safety

- The stereo system is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the system itself has been turned off.
- Unplug the system from the wall outlet (mains) if it is not to be used for an extended period of time. To disconnect the cord (mains lead), pull it out by the plug. Do not pull the cord itself.
- Should any solid object or liquid fall into the component, unplug the stereo system and have the component checked by qualified personnel before operating it any further.
- Should the AC power cord (mains lead) need to be changed, have it done at a qualified service shop only.
- As the laser beam used in this unit is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personal only.
- Do not open the disc tray during CD operations. This activates the safety device, stops operations, and starts initializing operations.

On installation

Place the stereo system in a location with adequate ventilation to prevent heat build-up in the stereo system.

On condensation in the CD player component

If the system is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the CD player. Should this occur, the CD player will not operate. Remove the CD and leave the system turned on for about an hour until the moisture evaporates.

To save a tape permanently

To prevent a tape from being accidentally recorded over, break off the cassette tab from side A or B as illustrated. If you later want to reuse the tape for recording, cover the broken tab with adhesive tape.
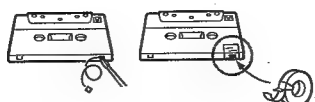
Troubleshooting Guide

If you run into any problem using this stereo system, use the following check list. And first check the following points:
- The mains lead is connected firmly.
- The speakers are connected correctly and firmly.

Should any problem persist after you have made the checks below, consult your nearest Sony dealer.

Tuner

"TUNED" flashes in the display.
→ Adjust the aerial.

"STEREO" flashes in the display.
→ Adjust the aerial.

Severe hum or noise.
→ Adjust the aerial.
→ The signal strength is too weak. Connect the external aerial.
→ Connect the ground wire.

A stereo FM programme cannot be received in stereo.
→ Press STEREO/MONO so that "STEREO" appears.

Tape Player

The tape does not record.
→ No tape in the cassette holder.
→ The tab has been removed from the cassette.
→ The tape has reeled to the end.

The tape does not record nor play back or there is a decrease in sound level.
→ The heads are dirty. Clean them.
→ Magnetic deposits have built-up on the record/playback heads.*

There is excessive wow or flutter, or the sound drops out.
→ The capstans or pinch rollers are contaminated.*

The tape does not erase completely.
→ Magnetic deposits have built- up on the record/playback heads.*

Noise increases or the high frequencies are erased.
→ Magnetic deposits have built-up on the record/playback heads.

* See "Maintenance".

CD Player

The CD tray does not close.
- → The CD is not placed correctly.

The CD will not play.
- → The CD is dirty.
- → The CD is inserted label side down.
- → Moisture condensation has built up.
  Leave the system turned on for about an hour until the moisture evaporates.

Play does not start from the first track.
- → The player is in programme or shuffle mode. Press CONTINUE.

" ⌐⌐" is displayed.
- → ▶▶▷▷I (or ▶▶I on the remote) was repeatedly pressed at the end of the CD. Press I◁◁◀◀ (or I◀◀ on the remote) to return to the normal display.

GB
Turntable (for the model supplied with the turntable only)

Tone arm skips, skates or does not advance.
- → Turntable is not level. Place it on a level surface.

Poor sound quality
- → The stylus is dirty. Clean or replace it.

Rumble or low frequency howl.
- → Turntable is placed too close to speakers. Move speakers away from the turntable.

The tone arm does not return to its armrest.
- → Press REJECT.

General

There is no sound.
- → Rotate VOLUME clockwise.
- → The headphones are connected. Disconnect them.

Sound comes from one channel or unbalanced left and right volume.
- → Check the speaker connections of the inoperative channel.

The left and right sound are reversed.
- → Check the speaker connection and speaker placement.

For Your Information

Bass is lacking or the location of the musical instruments is apparently imprecise.
- → Check the speaker connection for proper phasing.

There is severe hum or noise.
- → TV or VCR is too close to the stereo system. Move the stereo system away from the TV or VCR.

"0:00" flashes in the display.
- → A power interruption occurred. Set the clock and preset radio stations again.

The remote does not function.
- → The batteries have run down. Replace both batteries.
- → There is an obstacle between the remote and the system. Remove the obstacle.

Maintenance

To clean the tape heads and tape path
Contaminated tape heads cause poor recording or sound drop-out in playback. We recommend cleaning after every 10 hours of operation.

Open the cassette holder and wipe the heads, the pinch rollers and the capstans with a cleaning swab slightly moistened with cleaning fluid or alcohol. Wipe the parts shown below:

Deck A

Deck B

Insert a tape when the areas cleaned are completely dry.

To demagnetize the tape heads
After 20 to 30 hours of use, enough residual magnetism will have built up on the heads to begin to cause loss of high frequencies and hiss. At this time, demagnetize the heads and all metal parts in the tape path with a commercially available tape head demagnetizer. Refer to the instructions of the demagnetizer.

To clean the cabinet
Use a soft cloth slightly moistened with mild detergent solution.

To clean the CD
When a CD is dirty, clean it with a cleaning cloth. Wipe the CD from the centre out.

Notes on CD
- Do not use solvents such as benzene, thinner, commercially available cleaners, or anti-static spray intended for vinyl LPs.
- If there is a scratch, dirt or fingerprints on the CD, it may cause a tracking error.

To replace the Stylus (for PS-LX56P only)
Replace the stylus after every 400 hours of use. Turn off the power before replacing the stylus. Handle the stylus with care.
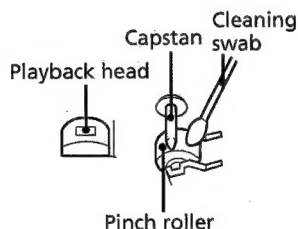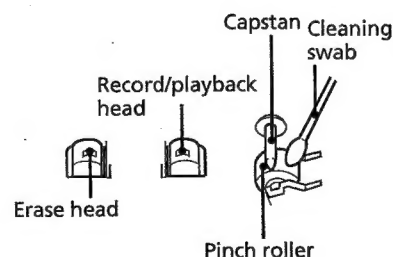

Specifications

CD player section
System Compact disc digital audio system
Laser   Semiconductor laser
Wavelength   780 – 790 nm

Tuner section
FM stereo, FM/AM superheterodyne tuner

FM tuner section
Tuning range   87.5 – 108.0 MHz
Aerial   FM wire aerial
Aerial terminals   75 ohm unbalanced
Intermediate frequency
                              10.7 MHz

AM tuner section
Tuning range
German and Italian models:
              AM: 531 – 1,602 kHz
Other models
              MW: 531 – 1,602 kHz
              LW: 153 – 279 kHz
                        (with the LW tuning interval set at 3 kHz)
Aerial   AM loop aerial
                        External aerial terminals
Intermediate frequency
                        450 kHz

Cassette deck section

Recording system
   4-track 2-channel stereo
Frequency response
   (DOLBY NR OFF)
   40 – 13,000 Hz (±3 dB), using
   SONY TYPE I cassette
   40 – 14,000 Hz (±3 dB), using
   SONY TYPE II cassette
Wow and flutter
   ±0.2% (DIN)

Amplifier section

Continuous RMS power output:
   20 W + 20 W (6 ohms at 1 kHz,
   DIN)
   25 W + 25 W (6 ohms at 1 kHz,
   5% THD)
Music power output
   50 W + 50 W (6 ohms at 1 kHz,
   10% THD)
Inputs
PHONO (phono jack):
   Sensitivity 3 mV, impedance
   47 kilohms

Outputs
PHONES (phone jack)
   accept headphones of 8 ohms or more.
SPEAKER: accept impedance of 6 to 16
   ohms.

Turntable (PS-LX56P)

(not supplied in some areas)
Platter   30 cm
Tone arm type   Dynamical balanced
Cartridge type   Moving magnet type
Stylus   Sony CN-234 (0.6 mil diamond)
Mass   Approx. 2.3kg
Dimensions
   Approx. 335 × 95 × 345 mm (w/h/d)
   incl.projecting parts and controls

Supplied accessories

AM loop aerial (1)
Remote RM-S200L (1)
Sony SUM-3 (NS) batteries (2)
FM wire aerial (1)
45-r/min adaptor (1) (for the model
   supplied with the turntable
   only)

General

Power requirements
   220 – 230 V AC, 50/60 Hz
Power consumption
   70 w
Dimensions
   Approx. 355 × 425 × 405 mm (w/h/d)
   incl. projecting parts and controls
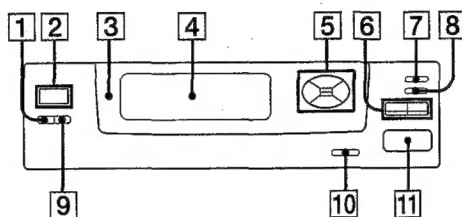Mass   Approx. 10.5 kg

Design and specifications subject to change
without notice.

Index to Parts and Controls

Refer to the pages indicated in parentheses
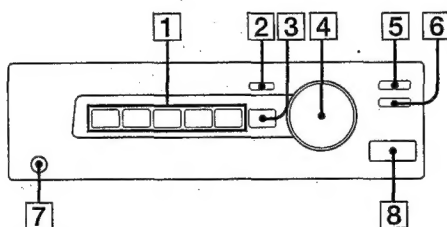for details on how to use the controls.

Front Panel

Tuner section

1 CLOCK SET button (6)
2 SYSTEM POWER switch (7)
3 Remote sensor
4 Display window (22)
5 CURSOR CONTROL buttons (6, 17)
6 TUNING (+/−) buttons (11)
7 TUNING MEMORY button (12)
8 TUNING MODE button (11)
9 CLOCK ENTER/NEXT button (6)
10 DISPLAY button (6, 9, 17)
11 TUNER/BAND button (11, 15)

Amplifier section

1 Preset equalizer setting buttons (16)
2 EQ MEMORY button (17)
3 P.FILE button (16, 17)
4 VOLUME control (8, 16)
5 DBFB button (16)
6 SURROUND button (17)
7 PHONES jack (18)
8 PHONO button (7, 18)

Tape player section
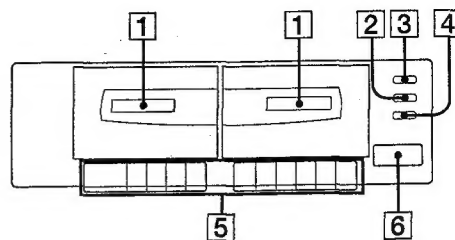
1 Cassette compartments (13)
2 TAPE SELECT selector (13)
3 DOLBY NR selector (14)
4 DUBBING SPEED selector (15)
5 Tape operating buttons
   ▷ (play) (13)
   ▶▶ (fast rightward) (13)
   ◀◀ (fast leftward) (13)
   ■/▲ (stop/eject) (13)
   ● REC (recording) (for deck B only)
   (14)
   ❚❚ PAUSE button (13)
6 TAPE button (13)
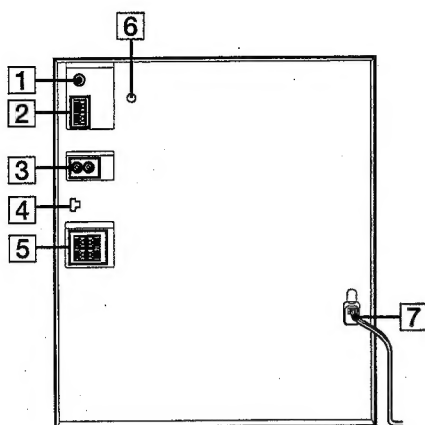
CD player section
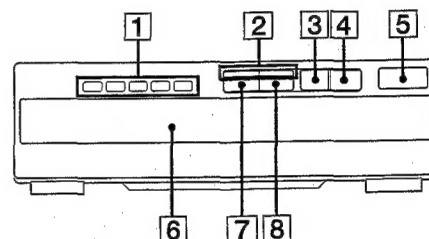
1 DISC SELECT 1 – 5 buttons (8)
2 I◀◀ ◀◀/▶▶ ▶▶I (AMS) buttons (8, 14)
3 DISC SKIP button (8)
4 ▲ OPEN/CLOSE button (8, 14)
5 CD ▷ (play) button (8, 14)
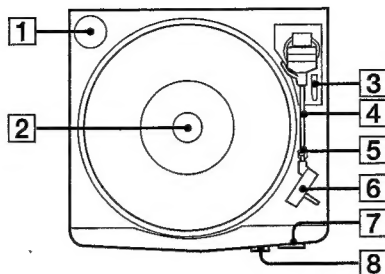6 Disc tray (8)
7 ❚❚ (pause) button (8)
8 ■ (stop) button (8)

Rear Panel

[1] FM 75Ω terminal (4)
[2] AM terminal (4)
[3] PHONO IN jacks (4)
[4] POWER SOURCE terminal (4)
[5] SPEAKER connectors (4)
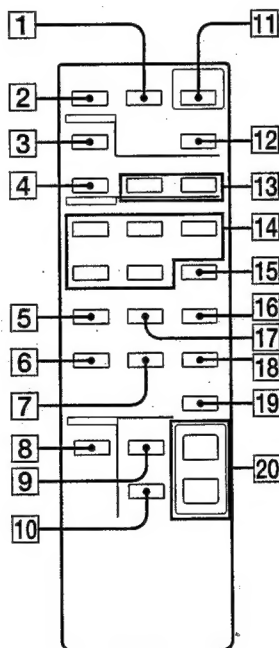[6] ⏚ ground terminal (4)
[7] AC power cord (5)

Display Window

[1] Spectrum analyzer (17)
[2] RELAY indications (13)
[3] Tuner indication (11)
[4] Disc calendar (8)
[5] Band/disc/track indications (8, 11, 14)
[6] AUTO/TUNING/PRESET/STEP indication (11)
[7] Frequency/playing time indications (8, 12, 14)
[8] SLEEP indications (18)
[9] DBFB indication (16)
[10] SURROUND indication (17)
[11] Music calendar (8, 14)
[12] CD play mode indication (8)
[13] VOLUME indication (8)

Turntable (For the model supplied with the turntable only)

[1] 45-r/min adaptor (7)
[2] center spindle
[3] Cuing lever (7)
[4] Tone arm (7)
[5] Armrest (7)
[6] Cartridge (7)
[7] REJECT button (7)
[8] SPEED selector (7)

Remote

[1] DISPLAY button (6, 9, 17)
[2] FUNCTION button (8, 14)
[3] BAND button (11)
[4] STEREO/MONO button (15)
[5] CONTINUE button (8)
[6] CHECK button (10)
[7] CLEAR button (10, 15)
[8] TAPE button (13)
[9] PRESET EQ button (16)
[10] P.FILE button (17)
[11] SYSTEM POWER button (7)
[12] SLEEP button (18)
[13] PRESET (+/–) buttons (12)
[14] CD operating buttons
   ► (play) (10)
   ◄◄ /►►I AMS* (10)
   II (pause) (10)
   ■ (stop) (10)
   * AMS: Automatic Music Sensor
[15] REPEAT button (10)
[16] PROGRAM button (10)
[17] SHUFFLE button (9)
[18] EDIT button (14)
[19] DISC SKIP button (10)
[20] VOL (volume) buttons (8, 16)

For Your Information

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